

15 impedance of the network approximately matches transmission
16 impedance of the signal lead of the optoelectronic device.

1 38. The optoelectronic assembly of claim 37, wherein the at
2 least one electrical component includes a resistor.

1 39. The optoelectronic assembly of claim 37, wherein the at
2 least one electrical component includes a capacitor.

1 40. The optoelectronic assembly of claim 37, wherein the at
2 least one electrical component includes a capacitor and a
3 resistor.

1 41. The optoelectronic assembly of claim 40, further
2 including
3 a circuit interconnect coupled to the optoelectronic
4 device and the transistor outline package, the circuit
5 interconnect having an associated transmission impedance,
6 wherein the circuit interconnect is configured so that, for
7 operation in a predefined range of frequencies above 3 GHz,
8 the transmission impedance of the circuit interconnect
9 approximately matches the transmission impedance of the
10 signal lead of the optoelectronic device.

1 42. The optoelectronic assembly of claim 37, further
2 including
3 a circuit interconnect coupled to the optoelectronic
4 device and the transistor outline package, the circuit
5 interconnect having an associated transmission impedance,
6 wherein the circuit interconnect is configured so that, for
7 operation in a predefined range of frequencies above 3 GHz,
8 the transmission impedance of the circuit interconnect
9 approximately matches the transmission impedance of the
10 signal lead of the optoelectronic device.

1 43. The optoelectronic assembly of claim 37, wherein the base
2 of the optoelectronic device includes a concentric dielectric
3 ring situated around the signal lead, electrically isolating
4 the signal lead from the base, and a concentric ground ring
5 situated around the dielectric ring, the concentric ground
6 ring forming a direct contact with the conductor of the
7 circuit interconnect.

1 44. The optoelectronic assembly of claim 37, wherein the
2 transistor outline package includes a pedestal shaped to be
3 concentrically positioned around at least a portion of the
4 signal lead.

1 45. The optoelectronic assembly of claim 44, further
2 including

3 a circuit interconnect coupled to the optoelectronic
4 device and the transistor outline package, the circuit
5 interconnect having an associated transmission impedance,
6 wherein the circuit interconnect is configured so that, for
7 operation in a predefined range of frequencies above 3 GHz,
8 the transmission impedance of the circuit interconnect
9 approximately matches the transmission impedance of the
10 signal lead of the optoelectronic device.